



FY 2005
3rd Quarter
Report

Water Lines

SDW Hotline Report

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Top Ten Caller Topics

| Topic | Number of Questions | Percent of Total* Questions |
|------------------------------|---------------------|-----------------------------|
| Local Drinking Water Quality | 1,242 | 17 |
| Consumer Confidence Reports | 1,033 | 14 |
| Tap Water Testing | 645** | 9 |
| Safe Drinking Water Act | 497 | 7 |
| Home Water Treatment Units | 388 | 5 |
| Lead | 327 | 4 |
| Complaints About PWSSs | 252 | 3 |
| Cryptosporidium | 219 | 3 |
| Bottled Water | 205 | 3 |
| Public Notification | 192 | 3 |

*A total of 7,283 questions from callers were answered by the Hotline in the 3rd Quarter of FY 2005.

**Citizens who obtain their drinking water from private household wells asked 10 percent of the tap water testing questions.

Calls and ECSS Incidents

| Calls*** | ECSS Incidents**** | Total |
|----------|--------------------|-------|
| 4,324 | 251 | 4,575 |

***A single call may generate multiple questions.

**** Incidents registered through EPA's Enterprise Customer Service Solution knowledge base at the OGWDW Web site.

Published Quarterly

See past reports at

<http://intranet.epa.gov/ow/hotline>

Safe Drinking Water Hotline: National

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Operated by Booz Allen Hamilton

Under Contract #GS-10F-0090J

What's New

New Publications:

Tentative allotments of the Drinking Water State Revolving Fund appropriation for FY 2006 are available at www.epa.gov/safewater/dwsrf/allotments.

The 2003 *Drinking Water Infrastructure Needs Survey and Assessment* (EPA816-R-05-001) and additional information including a fact sheet, needs survey allotment results, and past surveys are available at www.epa.gov/safewater/needssurvey.

FACTOIDS: Drinking Water and Ground Water Statistics for 2004 (EPA816-K-05-001) is available at www.epa.gov/safewater/data/getdata.html.

The poster *The Underground Injection Control Program: 30 Years Protecting Ground Water Through the Safe Drinking Water Act* (EPA816-H-05-001A) is available on the revised Underground Injection Control Program Web site at www.epa.gov/safewater/uic.

Quick reference guides for the Surface Water Treatment Rules for systems using conventional or direct filtration (EPA816-F-04-003); slow sand, diatomaceous earth, or alternative filtration (EPA816-F-04-002); and unfiltered systems (EPA816-F-04-003) are available at www.epa.gov/safewater/mdbp/implement.html.

The 2004 Safe Drinking Water Hotline annual report and FY 2005 first and second quarter reports are available at www.epa.gov/safewater/hotline/reports.html.

The fifth edition of the *Manual for the Certification of Laboratories Analyzing Drinking Water* (EPA815-R-05-004) is available at www.epa.gov/safewater/labcert/labindex.html.

Information about the availability of FY 2005 congressional appropriations funding for the Public Water System Supervision (PWSS) and Drinking Water State Revolving Fund (DWSRF) programs is available at www.epa.gov/safewater/pws/grants and www.epa.gov/safewater/dwsrf/allotments.

Did You Know?

National Drinking Water Week was May 1-7, 2005. Links to activities for kids, teachers, and adults to celebrate National Drinking Water Week are available at www.epa.gov/safewater/sdwa/waterweek.

Calendar:

| Who? | What? | Where? | When? | More Information |
|-------|--|----------------|-------------------|--|
| NDWAC | Water Security Working Group Meeting | Arlington, VA | April 18-20, 2005 | |
| EPA | Public Meeting To Discuss the Development of Regulations for Aircraft Public Water Systems | Washington, DC | June 1, 2005 | |
| NDWAC | Public Meeting | Washington, DC | June 1-3, 2005 | |
| EPA | Lead in Plumbing Fittings and Fixtures Workshop | Washington, DC | July 26-27, 2005 | |
| EPA | Drinking Water Security Workshops | Various | On-going | www.epa.gov/safewater/security |
| DWA | SDW Regulatory Compliance Training | Various | On-going | www.epa.gov/safewater/dwa/calendar.html |

Quarterly Trend

The Safe Drinking Water Act requires community water systems to prepare and deliver consumer confidence reports (CCRs) annually by July 1. The Safe Drinking Water Hotline receives numerous questions relating to the information provided in the report's contaminant tables. The Hotline has compiled the following information to address common questions on the units of measure used to express levels of detection.

Consumer Confidence Reports: Units of Measure

Units used for chemical contaminants

A milligram per liter (mg/L) is a unit of measure for the concentration of a dissolved substance in water. A concentration of one mg/L means that one milligram of a substance is dissolved in each liter of water. For practical purposes, this unit is equal to parts per million (ppm) since one liter of water is basically equal in weight to one million milligrams. Thus, a liter of water containing 10 milligrams of cadmium has 10 parts of cadmium per one million parts of water, or 10 parts per million (10 ppm).

Usually contaminants are found in water in minute quantities. Another common unit of measure for smaller concentrations of contaminants in water is micrograms per liter (µg/L). This unit is equal to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms. One mg/L is equivalent to 1000 µg/L and one ppm is equivalent to 1000 ppb. For example, the maximum contaminant level (MCL) for cadmium is 0.005 mg/L (or 0.005 ppm) which is equivalent to 5 µg/L (or 5 ppb).

Units used for radionuclides (radioactive contaminants)

Units of measure such as mg/L or ppm are commonly used to describe the concentration of chemicals in drinking water. However, unique properties of radioactive contaminants such as radium limit the utility of these units, and alternative units are used to compare the health effects of different radioactive substances. The potential health effects from radioactive contaminants depend on the amount of radiation emitted by a radioactive substance and the type of radiation, not the mass of a substance.

Activity units

A unit that describes the number of radioactive emissions over time (activity) is used for radionuclides. For drinking water, the concentration units for most radioactive contaminants are reported as pCi/L. A pCi, or picoCurie, is a measure of radioactivity. The MCL for combined radium uses activity units (i.e., 5 pCi/L).

Dose units

The activity and type of radiation collectively determine the absorbed dose to body tissue when emissions occurs internally, and the internal organs are the target. A dose unit reflects the amount of radiation imparted to body tissue. To compensate for the difference in damage between different types of radiation particles and their subsequent effect, a unit called rem was created. Rem is the unit of measurement for the dose equivalent from radiation to the total body or any internal organ or organ system. The MCL for beta particles and photon emitters uses a dose equivalent unit (i.e., 4 millirems/yr.)

Uranium

Uranium causes both chemical toxicity and radioactivity. The MCL for uranium is based on the chemical toxicity effects and therefore uses mg/L as the unit of measurement.

Frequently Asked Qs & As

This section provides answers to frequently asked questions not necessarily represented in one of the Top Ten Topic categories.

Q: Are community water systems required to provide a translated copy of the consumer confidence report (CCR) in languages other than English (e.g., Spanish)?

A: In communities with a large proportion of non-English speaking residents, as determined by the primacy agency, community water systems (CWSs) must include information in the appropriate language regarding the importance of the CCR or a telephone number or address where such residents may contact the CWS to obtain a translated copy of the report or assistance in the appropriate language (40 CFR 141.153(h)). Additional information on the requirements for CCRs is available at www.epa.gov/safewater/ccr1.html.

Q: If a community water system (CWS) is operating under the terms of a variance or exemption, are they required to include information about it on their consumer confidence report (CCR)?

A: If a CWS is operating under a variance or exemption, they must include in their CCR an explanation of the reasons for the variance or exemption, the date on which it was issued, the steps that the CWS is taking to comply with the terms of the variance or exemption, and a notice of any opportunity for public input in the review, or renewal, of the variance or exemption (40 CFR 141.153(g)). Additional information on the requirements for CCRs is available at www.epa.gov/safewater/ccr1.html.

Q: How must a community water system (CWS) present the number of positive samples for coliform in their consumer confidence report (CCR)?

A: For total coliform, a CWS must include in their CCR the highest monthly percentage of positive samples, or the highest monthly number of positive samples if they collect fewer than forty samples per month (40 CFR 141.153(d)(4)(vii)). For fecal coliform, a CWS must include the total number of positive samples (40 CFR 141.153(d)(4)(viii)). Additional information on the requirements for CCRs is available at www.epa.gov/safewater/ccr1.html.

Q: If a public water system exceeds the action level for lead or copper in a monitoring period, would this constitute a violation of the National Primary Drinking Water Regulations? If so, would this trigger any public notification requirements?

A: Exceeding the action level for lead or copper is not a violation and does not trigger public notification requirements (*Lead and Copper Monitoring and Reporting Guidance for Public Water Systems*, EPA 816-R-02-009, February 2002). However, if a public water system exceeds the lead action level, the facility must deliver public education information to their customers (40 CFR 141.85). This information must include information about the health effects of lead, how lead can enter into drinking water, and steps that consumers can take in the home to reduce exposure to lead in drinking water (40 CFR 141.85(a)(1)).

Q: What is the health risk from showering with water contaminated with radon?

A: The National Academy of Sciences (NAS) and EPA conclude that the risk to humans from radon released during showering is likely to be small. This is because the inhalation risk (i.e., cancer risk) of radon is due almost entirely to radon progeny rather

than radon itself, and it takes time (several hours) for radon progeny to build up to levels of high risk from the decay of radon.

During a typical shower lasting about ten minutes, the level of progeny build up to only a small percentage of the maximum possible level. Showering is one of many indoor water uses that contribute to the occurrence of radon in indoor air, but hazards from inhalation of radon during showering are not of special concern (64 FR 59246, 59317; November 2, 1999).

Q: What is the Drinking Water State Revolving Fund (DWSRF)?

A: Congress established the DWSRF as part of the 1996 Safe Drinking Water Act (SDWA) Amendments. The goal of the program is to provide states with a financing mechanism for ensuring safe drinking water to the public. Since federal fiscal year 1998, the SDWA has required that EPA distribute grant funding to each state based on the state's proportional share of the total eligible needs reported for the most recent Drinking Water Infrastructure Needs Survey. States can use the grant money awarded to them to set up an infrastructure funding account and subsequently provide assistance to public water systems. Loans made under the program can have interest rates between zero percent and market rate and repayment terms of up to twenty years. Loan repayments to the state will provide a continuing source of infrastructure financing. The program also places an emphasis on small and disadvantaged communities and on programs that emphasize prevention as a tool for ensuring safe drinking water. More information about the DWSRF is available at www.epa.gov/safewater/dwsrf.

Q: Where can I find information regarding Drinking Water State Revolving Fund (DWSRF) allotments?

A: Allotments for states, tribes, and territories are available through the DWSRF Annual Allotments Web site at www.epa.gov/safewater/dwsrf/allotments. This site has links to allotments for fiscal years 2002 through 2005. Links to related topics such as fact sheets and pertinent Federal Registers are also available from this Web site.

The allotments are based on the Drinking Water Infrastructure Needs Survey conducted by EPA and reported to Congress every four years. The amount of DWSRF program funding for fiscal year 2005 is \$843,200,000. The current funding reflects the needs identified in the second report to Congress released in 2001. A third report to Congress will be

released in 2005 and the results will be used to calculate state grant allotments for appropriations made in fiscal years 2006 through 2009.

Q: What is the Safe Drinking Water Information System (SDWIS), and what information is available through SDWIS?

A: The federal version of SDWIS (SDWIS/FED) is a national regulatory compliance database that stores information about the country's drinking water supply. SDWIS/FED contains basic information on every public water system, including the name of the public water system; the type of area served by the water system (e.g., households, schools, or restaurants); the number of individuals served by the water system; the operating season of the water system (year round or seasonal); if a water system has violated any national drinking water standards; and what follow-up actions, including enforcement actions, have been taken to address the violation. This information is collected and stored in SDWIS/FED in order to help EPA monitor the safety of the nation's drinking water supply, report information to the public and to Congress on the status of public drinking water, and help EPA and states determine when additional actions are necessary to protect drinking water (*Information Available from the Safe Drinking Water Information System (SDWIS)*, EPA816-F-98-006; October 1998). Additional information regarding SDWIS/FED is available at www.epa.gov/safewater/databases.html.

Q: Sections 1422 and 1425 of the Safe Drinking Water Act allows EPA to award primary enforcement responsibility (i.e., primacy) for the Underground Injection Control (UIC) program to states. Where can I find a list of states that have been delegated primacy for the UIC program?

A: A list of states that have been delegated the authority to implement the UIC program is available at www.epa.gov/safewater/uic/primacy2.html. This list also specifies whether the state has primacy for all classes of UIC wells, only Class II wells, or for all wells except Class II (Classes I, III, IV, and V). In addition, 40 CFR Part 147 codifies the state UIC program descriptions and outlines which aspects of the UIC programs are overseen by EPA and which are delegated to the states.

The Safe Drinking Water Hotline is often asked to help diagnose which drinking water contaminants can cause taste, odor, or staining problems. To assist customers with this determination, the Hotline has prepared the following FAQs addressing common water quality problems.

Staining/Discoloration

Q: What can cause blue-green stains on items in contact with tap water?

A: Copper can produce blue-green stains on sinks, porcelain bathroom fixtures, and even on laundry. Copper levels above 1.0 mg/L can produce a metallic taste, a blue-green color, and a possible odor to the water. Copper plumbing is usually the source of copper in drinking water. EPA set a non-enforceable secondary maximum contaminant level of 1.0 mg/L for copper in order to prevent these aesthetic effects.

EPA has set an enforceable action level of 1.3 mg/L to prevent adverse health effects. There are no known or expected adverse health effects associated with copper concentrations below the action level. Copper is an essential nutrient in the normal diet and ingestion of small amounts of copper is not considered toxic (42 FR 17143, 17144; March 31, 1977), though persons with Wilson's Disease, a copper metabolism disorder, can be adversely affected by even trace amounts of copper.

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause red, brown, or orange stains on items in contact with tap water?

A: Iron can produce rusty brown stains on plumbing fixtures, fabrics, dishes, and utensils when it combines with oxygen in the water (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). Iron also produces a noticeable bitter or metallic taste in water, food, and beverages such as coffee and tea. The daily nutritional requirement for iron is 1-2 mg, yet the average diet contains 16 mg (*National Secondary Drinking Water Regulations*; EPA570-9-76-000; June 1984). The amount of iron causing staining or objectionable taste is a small fraction of the normal daily intake and does not have toxicological significance (42 FR 17143, 17144; March 31, 1977). EPA set a non-enforceable secondary maximum contaminant level of 0.3 mg/L in order to prevent aesthetic effects (e.g., staining, taste).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause brown or black stains on items in contact with tap water?

A: Manganese forms brownish-black particles in water that can stain plumbing fixtures, fabrics, dishes and utensils when it combines with oxygen in water. Manganese can produce a black color in water and also give a noticeable bitter, metallic taste to water, food, and beverages such as tea and coffee (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). Manganese is an essential nutrient and it has been estimated that the daily intake from a normal diet is about 10 mg. Ingestion of manganese in moderate excess of the normal dietary level is not considered harmful (*National Secondary Drinking Water Regulations*; EPA570-9-76-000; June 1984). EPA set a non-enforceable secondary maximum contaminant level of 0.05 mg/L for manganese in order to prevent most aesthetic effects.

Hydrogen sulfide gas in association with iron can cause black stains on plumbing fixtures. In addition, the presence of dissolved hydrogen sulfide gas may tarnish silverware and cause a "rotten egg" odor in water. EPA has not set a standard for hydrogen sulfide in drinking water.

Very high chloride content in tap water causes blackening and pitting of stainless steel sinks. High chloride ion concentration can also produce a salty taste in tap water and result in corrosion of piping. EPA has set a non-enforceable secondary maximum contaminant level of 250 mg/L for chloride to prevent most aesthetic effects.

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause a gray coloration of skin?

A: Silver in drinking water can cause a discoloration of skin, eye, and mucous membranes known as argyria when ingested (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). Silver is seldom found at significant levels in water supplies and drinking water has never been identified as the cause of argyria in the United States. EPA considers argyria a cosmetic effect since it does not impair body function and only causes a gray discoloration. Silver does not affect the taste, odor, color or appearance of the drinking water, nor is there evidence that the low level of silver that may be found in drinking water causes argyria. EPA has set a non-enforceable secondary maximum contaminant level of 0.1 mg/L to protect the welfare of the general public from the cosmetic effect of argyria (56 FR 3526, 3527; January 30, 1991).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause a red or pink slime around plumbing fixtures?

A: Iron bacteria can produce a slimy rust-colored mass on plumbing fixtures and any surface in contact with water containing these organisms. Iron bacteria give an unpleasant taste and odor to the water, discolor and spot fabrics and plumbing fixtures, reduce water flow through pipes, and clog pumps (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). While the aesthetic problems caused by iron bacteria in drinking water may not directly represent a public health risk, the appearance of aesthetic problems may signal pipe deterioration or other issues that may represent, or lead to, a health concern (*Health Risks from Microbial Growth and Biofilms in Drinking Water Distribution Systems*, June 17, 2002). EPA has not set a standard for iron bacteria in drinking water.

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General

information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause mottling or discoloration of teeth?

A: Fluoride in drinking water can cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of teeth, and occurs only in developing teeth before they erupt from the gums. Because children may get mottled teeth at levels above 2.0 mg/L, EPA has set a non-enforceable secondary maximum contaminant level of 2.0 mg/L. EPA has also set an enforceable maximum contaminant level of 4.0 mg/L to prevent against adverse health effects.

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Odor

Q: What can cause tap water to smell like rotten eggs?

A: The "rotten egg" odor in water may be caused by the presence of sulfate reducing bacteria in distribution lines or water heaters or by the presence of dissolved hydrogen sulfide gas. In addition to an odor, hydrogen sulfide gas can cause black stains on plumbing fixtures and tarnish silverware. EPA has not set a standard for hydrogen sulfide in drinking water.

Additionally, a "rotten egg" odor associated with hot water may be due to magnesium rods in hot water heaters. The rod is a component of the water heater and the odor may be eliminated by removing the rod (*Manual of Small Public Water Supply Systems*, EPA570-9-91-003; May 1991).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause tap water to smell like bleach?

A: Chlorine used for disinfection of drinking water may produce a bleach odor in drinking water. It may also impart a chlorine bleach taste to the water. EPA has not set a standard for these aesthetic effects. However, EPA has set a maximum residual disinfectant level of 4 mg/L for chlorine that is appropriate for preventing physiological health effects, such as eye and nose irritation and stomach discomfort (63 FR 69390, 69411; December 16, 1998).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Taste

Q: What can cause tap water to have a metallic taste?

A: A metallic taste can be caused by manganese, iron, zinc, or copper. These metals often discolor tap water and can stain plumbing fixtures and clothing. EPA has set non-enforceable secondary maximum contaminant levels for these contaminants that will prevent most aesthetic and cosmetic effects. EPA has set enforceable maximum contaminant levels for those contaminants that may cause adverse health effects (*Secondary Drinking Water Regulations: Guidance for Nuisance Chemicals*, EPA810-K-92-001; July 1992).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause tap water to taste like salt?

A: High chloride ion concentration can produce a salty taste in tap water. Chloride ions in high concentrations can also result in corrosion of piping. Very high chloride content in tap water causes blackening and pitting of stainless steel sinks. EPA has set a non-enforceable secondary maximum

contaminant level of 250 mg/L for chloride to prevent most aesthetic effects.

Sulfate concentrations can produce a salty taste in tap water. Sulfates, such as magnesium sulfate and sodium sulfate, can have a laxative effect for persons who are not acclimated to the water and produce hard scales in boilers and water heaters. Sulfates are not easily removed from water, however using an alternate water source or blending sources produces acceptable remedies for sulfate in drinking water. The only observed health effects above 500 mg/L has been the induction of diarrhea. EPA has set a non-enforceable secondary maximum contaminant level for sulfate of 250 mg/L to prevent most taste effects and prevent laxative effects in even the most sensitive consumers (*Manual of Small Public Water Supply Systems*, EPA570-9-91-003; May 1991).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Water Discoloration

Q: What can cause tap water to appear brown or black?

A: Manganese can produce a black color in water when it combines with oxygen in the air. Manganese forms brownish-black particles in water that can stain plumbing fixtures, fabrics, dishes and utensils. Manganese also gives a noticeable bitter, metallic taste to water, food, and beverages such as tea and coffee (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). Manganese is an essential nutrient and has a daily intake of 10 mg. Ingestion of manganese in moderate excess of the normal dietary level is not considered harmful. Therefore, EPA has set a non-enforceable secondary maximum contaminant level of 0.05 mg/L for manganese in order to prevent most aesthetic effects (*National Secondary Drinking Water Regulations*; EPA570-9-76-000; June 1984).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General

information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause tap water to appear red, brown, or orange?

A: Iron can cause water to appear reddish-orange. Iron combines with oxygen to form reddish-brown particles in water that produce rusty brown stains on plumbing fixtures, fabrics, dishes, and utensils. Large concentrations of iron can produce iron sediments or deposits in the water. Iron also produces a noticeable bitter, metallic or astringent taste in water, food, and beverages such as coffee and tea coffee (*Manual of Small Public Water Supply Systems*; EPA570-9-91-003; May 1991). The daily nutritional requirement for iron is 1-2 mg, however the average diet contains 16 mg. The amount of iron causing discoloration of tap water is a small fraction of the normal daily intake and does not have toxicological significance. EPA has set a non-enforceable secondary maximum contaminant level of 0.3 mg/L to prevent most aesthetic effects (*National Secondary Drinking Water Regulations*; EPA570-9-76-000; June 1984).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause the tap water to be cloudy or milky?

A: Cloudy water commonly is caused by air in the water. If the cloudiness does not dissipate when the water is allowed to stand, the cloudiness may be due to some other cause. To help determine the cause(s) of cloudiness of your drinking water, contact your local drinking water system.

Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause tap water to appear foamy?

A: Foaming is usually caused by synthetic organic chemicals called surfactants. Surfactants, commonly found as ingredients in household detergents, may

contaminate sources of drinking water though household or industrial waste disposal. Foaming agents cause frothing at and above concentrations of 1 mg/L and are associated with an oily, fishy, or perfume-like taste (*Secondary Drinking Water Regulations: Guidance for Nuisance Chemicals*; EPA810-K-92-001; July 1992).

Ingestion of doses above 50 mg/L, assuming a two liter per day consumption, may cause gastrointestinal irritation. EPA set a secondary maximum contaminant level of 0.5 mg/L to prevent the occurrence of visible foam. However, since the presence of foaming substances in drinking water is an indicator of sewage contamination, the appearance of visible foam should be investigated immediately (*National Secondary Drinking Water Regulations*; EPA570-9-76-000; June 1984).

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Q: What can cause tap water to appear blue-green?

A: Copper can produce a blue-green color, a metallic taste, and a possible odor in tap water at levels above 1.0 mg/L. Copper can also produce blue-green stains on sinks, porcelain bathroom fixtures, and even on laundry. Copper plumbing is usually the source of copper in drinking water. EPA has set a non-enforceable secondary maximum contaminant level of 1.0 mg/L in order to prevent these aesthetic effects.

EPA has set an enforceable action level of 1.3 mg/L to prevent adverse health effects. There are no known or expected adverse health effects associated with copper at concentrations below the action level. Copper is an essential nutrient in the normal diet and ingestion of small amounts of copper is not considered toxic (42 FR 17143, 17144; March 31, 1977), though persons with Wilson's Disease, a copper metabolism disorder, can be adversely affected by even trace amounts of copper.

To help determine the cause(s) of aesthetic or cosmetic effects from your drinking water, contact your local drinking water system. Additional guidance for household well owners is available at www.epa.gov/safewater/privatewells. General information on nuisance chemicals is available at www.epa.gov/safewater/consumer/2ndstandards.html.

Quarterly Summary of Hotline Service

| | |
|--|-------|
| Total number of calls answered | 4,324 |
| Total number of ECSS incidents | 251 |
| Average wait time (in seconds) | 0:42 |
| Percent of calls satisfied immediately | 99.9% |
| Percent of all calls answered in < 5 min | 96.5% |
| Percent of callbacks answered in 5 days | 100% |
| Number of times callers were transferred to the WSC Wellcare Hotline | 886 |
| Number of times callers listened to recorded message about CCRs | 1,102 |
| Number of times callers listened to recorded message about local drinking water quality for PWS customers | 972 |
| Number of times callers listened to recorded message about tap water testing and quality for household well owners | 519 |
| Number of times callers listened to recorded message about tap water testing for PWS customers | 1,166 |

Comparison to Previous Year

| | Calls | Electronic Correspondences* |
|---------------------------------|-------|-----------------------------|
| 3 rd Quarter FY 2005 | 4,324 | 251 |
| 3 rd Quarter FY 2004 | 4,895 | 622 |

*Method of electronic correspondence changed from e-mail to the EPA ECSS system in November 2004.

Top Ten Referrals

| Inquiry Referred to: | Number of Referrals | Percent of Total* Referrals |
|-------------------------|---------------------|-----------------------------|
| Local Water System | 743 | 23 |
| State Lab Certification | 519 | 16 |
| State PWSS | 436 | 14 |
| NSF/WQA/UL | 341 | 11 |
| EPA Internet | 309 | 10 |
| AGWT/WSC | 129 | 4 |
| Local Public Health | 121 | 4 |
| FDA/IBWA | 100 | 3 |
| Other Hotlines | 82 | 3 |
| Other | 74 | 2 |

*A total of 3,181 referrals to other resources, agencies, and organizations were provided by the Hotline in the 3rd Quarter of FY 2005.

Customer Profiles

| Customer | Calls |
|------------------------------------|--------------|
| Analytical Laboratories | 32 |
| Citizen - Private Well | 232 |
| Citizen - PWS | 3,152 |
| Consultants/Industry/Trade (DW) | 180 |
| Consultants/Industry/Trade (Other) | 70 |
| Environmental Groups | 3 |
| EPA | 38 |
| Other Federal Agency | 15 |
| Government, Local | 23 |
| Government, State | 72 |
| Government, Tribal | 3 |
| Spanish Speaking | 69 |
| International | 11 |
| Media | 6 |
| Medical Professional | 14 |
| Public Water System | 227 |
| Schools/University | 32 |
| Other | 145 |
| TOTALS | 4,324 |

ECSS Incident Topics

| Topic | Number of Incidents |
|-------------------------------|---------------------|
| Analytical Methods | 9 |
| Bottled Water | 3 |
| Compliance/Issues (PWS) | 30 |
| Consumer Concerns | 32 |
| Contaminants and Standards | 55 |
| Definitions | 4 |
| Facts, Figures, and Databases | 11 |
| Household Wells | 29 |
| Other | 46 |
| Local Drinking Water Quality | 21 |
| Source Water Protection | 3 |
| Tap Water Testing | 5 |
| Underground Injection Control | 1 |
| Water Security | 2 |
| TOTALS | 251 |

Caller Question Topics

| Topics | Number of Questions |
|--|---------------------|
| Microbials/Disinfection Byproducts | |
| Chlorine | 62 |
| Coliforms | 106 |
| Cryptosporidium | 219 |
| Disinfection/Disinfection Byproducts (Other) | 88 |
| Disinfection – Home Water | 77 |
| Other Microbials | 87 |
| Storage – Home Water | 11 |
| Surface Water Treatment (SWTR, ESWTR, LT1FBR) | 49 |
| Trihalomethane (THM) | 68 |
| Inorganic Chemicals (IOC)/Synthetic Organic Chemicals (SOC) | |
| Arsenic | 60 |
| Fluoride | 48 |
| Methyl- <i>tertiary</i> -butyl-ether (MTBE) | 19 |
| Perchlorate | 6 |
| Phase I, II & V | 85 |
| Sodium Monitoring | 9 |
| Sulfate | 1 |
| Lead and Copper | |
| Copper | 39 |
| Lead | 327 |
| Lead Contamination Control Act (LCCA)/Lead Ban | 29 |
| Radionuclides | |
| Radionuclides (Other) | 62 |
| Radionuclides (Radon) | 120 |
| Secondary DW Regulations | |
| Secondary DW Regulations | 86 |
| SDWA Background/Overview | |
| Definitions & Applicability | 30 |
| MCL List | 188 |
| Other Background | 115 |
| SDWA | 497 |

| Topics | Number of Questions |
|--|---------------------|
| Water on Tap | 7 |
| Other DW Regulations | |
| Analytical Methods (DW) | 74 |
| Contaminant Candidate List/ Drinking Water Priority List | 6 |
| Consumer Confidence Report (DW) | 1,033 |
| DW Primacy (PWS) | 11 |
| Operator (PWS) Certification | 8 |
| Other Drinking Water Security | 17 |
| Public Notification (PWS) | 192 |
| Security Planning Grants | 1 |
| State Revolving Fund (DW) | 10 |
| Unregulated Contaminant Monitoring Rule (UCMR) | 21 |
| Other Drinking Water | |
| Additives Program | 13 |
| Bottled Water | 205 |
| Complaints about PWS | 252 |
| Compliance & Enforcement (PWS) | 33 |
| Home Water Treatment Units | 388 |
| Infrastructure/Cap. Development | 16 |
| Local DW Quality | 1,242 |
| Tap Water Testing | 645 |
| Treatment/BATs (DW) | 23 |
| Drinking Water Source Protection | |
| Ground Water Rule | 22 |
| Sole Source Aquifer | 2 |
| Source Water/Wellhead Protection | 38 |
| UIC Program | 20 |
| Out of Purview | |
| Household Wells | 185 |
| Non-Environmental | 97 |
| Non-EPA Environmental | 100 |
| Other EPA (Programs) | 134 |
| TOTALS | 7,283 |

EPA DISCLAIMER

Answers to questions in the Safe Drinking Water Hotline quarterly report are intended to be purely informational and are based on SDWA provisions, EPA regulations, guidance, and established policy effective at the time of publication. The answers given reflect EPA staff's best judgment at the time and do not represent a final or official EPA interpretation. This report does not substitute for the applicable provisions of statutes and regulations, guidance, etc., nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, States, or the regulated community. An answer to a question in this report may be revised at any time to reflect EPA's revisions to existing regulations, changes in EPA's approach to interpreting its regulations or statutory authority, or for other reasons. EPA may provide a different answer to a question in this report in the future.

Also, an answer provided in this report may not apply to a particular situation based upon the circumstances. Any decisions regarding a particular case will be made based on the applicable statutes and regulations. Therefore, interested parties are free to raise questions and objections about the appropriateness of the application of an answer in this report to a particular situation, and EPA will consider whether or not the recommendations or interpretations in the answer are accurate and appropriate in that situation. The information in this report is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States.

SAFE DRINKING WATER HOTLINE QUARTERLY REPORT
Third Quarter FY 2005

APPENDIX A: FEDERAL REGISTER SUMMARIES

NOTICES

**“Public Water System Supervision Program Revision for the State of South Dakota”
April 25, 2005 (70 FR 21197)**

The state of South Dakota has revised its Public Water System Supervision (PWSS) Primacy Program by adopting federal regulations for the Arsenic Rule, Filter Backwash Recycling Rule, Long Term 1 Enhanced Surface Water Treatment Rule, and Radionuclides Rule, which correspond to 40 CFR parts 141 and 142. EPA has completed its review of these revisions in accordance with the SDWA, and proposes to approve South Dakota's primacy revisions for the above stated rules. The approval does not extend to Indian lands.

**“Proposed Penalty Order Issued Under the Clean Water Act and Safe Drinking Water Act; Notice of Intent To Provide Internet”
April 26, 2005 (70 FR 21410)**

EPA Region 5 will issue notices of proposed penalty orders issued under the Clean Water Act and the Safe Drinking Water Act via the Internet. Region 5 will commence use of Internet notice on May 26, 2005.

**“Notice of Tentative Approval and Solicitation of Request for a Public Hearing for Public Water System Supervision Program Revisions for the State of West Virginia”
April 29, 2005 (70 FR 22312)**

The state of West Virginia is revising its approved Public Water System Supervision Program. West Virginia has adopted the Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring Rule (the Arsenic Rule) that requires community and non-transient non-community water systems to comply with the revised arsenic maximum contaminant level of 0.010 mg/L. EPA has determined that these revisions are no less stringent than the corresponding Federal regulations. Therefore, EPA has decided to tentatively approve these program revisions.

**“Meeting of the National Drinking Water Advisory Council – Notice of Public Meeting”
May 9, 2005 (70 FR 24412)**

EPA gave notice for a meeting of the National Drinking Water Advisory Council (NDWAC or Council) on June 1, 2, and 3, 2005, in Washington, D.C. This Council was authorized by the Safe Drinking Water Act in 1974 (42 U.S.C. 300f et seq.) to support EPA in performing its duties and responsibilities related to the national drinking water program. The primary purpose of this meeting is for the Council to review and discuss the draft report of the Water Security Working Group. The Council will also continue the dialogue initiated in December 2004 on the revision of existing drinking water program indicators and measures and the potential development of new indicators/measures that are clearly focused on public health protection.

Updates on other EPA drinking water program activities will be presented if sufficient time is available.

“Notice of a Public Meeting To Discuss the Development of Regulations for Aircraft Public Water Systems”

May 13, 2005 (70 FR 25520)

EPA is holding a public meeting on Wednesday, June 1, 2005 in Washington, D.C., to discuss the development of regulations for aircraft public water systems. To support the rulemaking process, EPA will undertake a collaborative stakeholder process with representatives from industry, government, public interest groups, and the general public.

“Public Water Supply Supervision Program; Program Revision for the State of Oregon”

May 16, 2005 (70 FR 25828)

The state of Oregon has revised its approved State Public Water Supply Supervision (PWSS) Primacy Program. Oregon has adopted drinking water regulations for Public Notification, Radionuclides, Filter Backwash Recycling, Arsenic, Variances and Exemptions, and Enhanced Surface Water Treatment for systems serving less than 10,000 people. EPA has determined that these revisions are no less stringent than the corresponding federal regulations. Therefore, EPA intends to approve these state program revisions. This approval action does not extend to public water systems (PWSs) in Indian Country, as that term is defined in 18 U.S.C. 1151. By approving these rules, EPA does not intend to affect the rights of federally recognized Indian tribes in Idaho, nor does it intend to limit existing rights of the state of Oregon.

“Notice of a Public Meeting: Expert Panel Workshop on Lead in Plumbing Fittings and Fixtures”

June 28, 2005 (70 FR 37099)

EPA announces an expert panel workshop to discuss issues associated with the Lead and Copper Rule (LCR). This workshop will examine and discuss potential issues associated with lead in plumbing fittings and fixtures, including their potential to leach lead into water, existing standards and test protocols, utility challenges, and manufacturer perspectives. The workshop will be held on July 26 and 27, 2005, in Washington, D.C.